

## 植物研究雜誌

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## Notulæ ad Plantas Asiæ Orientalis (XVI).

T. NAKAI

中井猛之進: 東亞植物拾遺 (其十六)

246) **Miyoshiales** NAKAI, ordo nova.Syn. *Liliifloræ* ENGLER, Pflanzenfam. 2 Aufl. 15a, 4 (1930), pro parte; DIELS in ENGLER, Syllab. 11 Aufl. 157 (1936), pro parte.*Alismatales* HUTCHINSON, Fam. Flow. Pl. II, 32 (1934), pro parte.

Saprophyta echlorophyllata. Rhizoma squamis alternis instructum et radices fibrosas emittit. Caulis solitarius vel geminus. Folia squamata alterna evaginata vel vaginata. Flores terminali-corymbosi vel racemosi in axillis quæque bractæe solitarii. Pedicelli elongati et ebracteolati, vel breves et basi 1-2 bracteolatae. Tepala 6, exteriora 3 interioribus minora et angustiora omnia decolorata. Stamina 6, omnia in basi tepalorum inserta (epitepala), vel omnia in dorso ovarii adnata (epigyna), vel 3 exteriora supra basin tepalorum exteriorum inserta et 3 interiora et ad tepala interiora et ovaria affixa. Antheræ filamentis basifixæ biloculares introrsim vel laterali longitudine apertæ. Connectivum haud vel paulum productum. Ovarium superum vel semisuperum. Carpella 3 libera vel basi ventrali atque tepalis affixa. Styli breves. Stigmata capitata. Placenta ventralia. Ovula numerosa 3-oligoserialia anatropa cum integumentis binis. Capsulæ horizontali-patentes ventrali-rupsæ. Semina numerosa parva. Albumen copiosum. Embryo minimus hilo proximus.

Ordo proxima ad *Liliales* (*Liliifloræ*) sed planta saprophytica cum foliis squamatis, capsulis horizontali-patentibus et ut *Melanthaceæ* ventrali-dehiscentibus, ovulis in quaque axilla 3-oligoserialibus (nec ut *Liliales* 2-serialibus),

seminibus neque compressis neque alatis, non appendiculatis insigna.

HUTCHINSON prope *Scheuchzericeas* collocans in *Alismatales* affixit, sed planta saprophytica foliis exstipullatis, gynæcio cum stylo distincto, ovulis non basifixis sed ventrali-subaxillaribus  $\infty$ -serialibus etc. quibus nullam affinitatem exhibet.

Familia unica est.

Having follicles splitting ventrally this group approaches to *Melanthaceæ-Tofieldiæ* and *Veratree* (*Liliales*), but with ovules arranged more than three (3-5) rows it also keep relationship somewhat with *Pontederaceæ* (*Pontederales*), *Tillandsiaceæ* (*Bromeliales*), and *Hæmodorales* if the ovaries of the last become superior and split ventrally. By its small seeds it seems to have relation with *Burmanniæ* and *Orchidales*, but copiose albumen is not the subject of them. Saprophytic habit makes the plants of *Miyoshiales* much differing in appearance, however, we know the facts that there are often similar heteromorphisms of allied genera by saprophytism in *Orchidaceæ*.

**Miyoshiaceæ** MAKINO in Tokyo Bot. Mag. XVII, 144 in nota sub *Miyoshia* (1903).

Syn. *Liliaceæ* Trib. XVII. *Narthecieæ* BENTHAM & HOOKER, Gen. Pl. III-2, 760 (1883), pro parte.

*Liliaceæ* I. *Melanthoideæ* I. *Tofieldiæ* ENGLER in ENGLER & PRANTL, Nat. Pflanzenfam. II-4, 19 (1888), pro parte.

*Liliaceæ* I. *Melanthoideæ-Petrosaviæ* ENGLER, Nachtrag I, 72 (1897); KRAUSE in ENGLER, Pflanzenfam. 2 Aufl. 15a, 256 (1930); DIELS in ENGLER, Syllabus 11 Aufl. 157 (1936).

*Protoliriaceæ* MAKINO in Tokyo Bot. Mag. XVII, 208 (1903).

*Petrosaviaceæ* MAKINO, l. c. pro syn.; HUTCHINSON, Fam. Flow. Pl. II, 36 (1934).

*Melanthiaceæ-Tofieldiæ* LOTSY, Vorträge Bot. Stammesgeeschte III-1, 721 (1911), partim.

Ingenia ut ordinem. Genera tria sunt. Typus est *Miyoshia*.

{ Flores corymbosi. Pedicelli elongati ebracteolati. Folia caulina evaginantia.  
Stamina in basi tepalorum inserta (epitepala). Ovaria supera. Carpella libera. .... *Petrosavia*.

[ Ovaria semisupera. Carpella basi ventrali plus minus connata.

- |   |   |                      |
|---|---|----------------------|
| { | Folia caulina tubuloso-vaginantia. Flores corymbosi. Pedicelli elongati ebracteolati. Stamina in dorso ovarii adnata (epigyna). . . . .                             | <i>Protolirion</i> . |
|   | Folia caulina evaginantia. Flores recemosi. Pedicelli breves basi 1-2 bracteolati. Stamina in basi tepalorum inserta sed interiora simulque rarius epigyna. . . . . | <i>Miyoshia</i> .    |

Gn. 1. **Petrosavia** BECCARI in Nuovo Giorn. Bot. Ital. III, 7 (1871).

Sp. 1. **Petrosavia stellaris** BECCARI, l. c. 8, t. 1.

Hab. in Borneo.

Gn. 2. **Protolirion** RIDLEY in Ann. Bot. IX, 56 (1895).

Sp. 1. **Protolirion paradoxum** RIDLEY, l. c. 57, t. 3.

Hab. in Peninsula Malaya.

Gn. 3. **Miyoshia** MAKINO in Tokyo Bot. Mag. XVII, 144 (1903).

Syn. *Petrosavia* (non BECCARI) MAKINO, l. c. 208.

*Protolirion* RIDLEY apud KRAUSE in ENGLER, Pflanzenfam. 2 Aufl. 15a, 257 (1930), pro parte.

Sp. 1. **Miyoshia Sakurarii** MAKINO in Tokyo Bot. Mag. XVII, 144, t. 5 (1903).

Syn. *Petrosavia Miyoshia-Sakurarii* MAKINO in Tokyo Bot. Mag.

XVII, 208 (1903); MAKINO & NEMOTO, Fl. Jap. 1272 (1925); 2 ed., 1561 (1931); NEMOTO, Suppl. 1069 (1936).

*Protolirion Miyoshia-Sakurarii* MAKINO, l. c. 208; MATSUMURA, Ind. Fl. Jap. II-1, 211 (1905); KRAUSE in ENGLER, Pflanzenfam. 2 Aufl. 15a, 257 (1930).

*Protolirion Sakurarii* DANDY in Journ. Bot. LXIX, 53 (1931).

Hab. in Japonia. Prov. Mino.

Sp. 2. **Miyoshia Sinii** (KRAUSE) NAKAI, comb. nov.

Syn. *Protolirion Sinii* KRAUSE in Notizblatt Bot. Gart. Mus. Berlin-Dahlem X, 806 (1927).

Hab. in China, Prov. Kwangsi.

247) **Sorbus amurensis** KOEHNE in FEDDE, Repert. X, 514 (1912); NAKAI in Tokyo Bot. Mag. XXIX, 16 (Jan. 1916), Fl. Sylv. Kor. VI, 22 t. 2 (Dec.

1916); MORI, Enum. Corean Pl. 195 (1922).

Syn. *Sorbus aucuparia* (non LINNÆUS) KOMAROV in Acta Hort. Petrop. XXII, 472 (1903); NAKAI in Journ. Coll. Sci. Tokyo XXVI art. 1 (Fl. Kor. I) 176 (1909).

*Sorbus pohuashanensis* (non HEDLUND) NAKAI in Journ. Coll. Sci. Tokyo XXVI, art. 1 (Fl. Kor. I) 177 (1909), Tyosen Syokubutu I, 294, fig. 348 (1914).

var. **latifoliolata** NAKAI, var. nov.

Gemmæ rufæ, parce albo-pilosæ. Folia 4–6 jugo-imparipinnata, rachidibus albo-pilosis rubescentibus, foliolis terminalibus ellipticis vel ovatis vel obovatis 35–60 mm longis 20–30 mm latis duplicato-serrulatis apice mucronatis basi cuneatis vel rotundatis cum petiolulis 6–12 mm longis, foliolis lateralibus ellipticis 28–57 mm longis 16–27 mm latis duplicato-serrulatis apice mucronatis basi distincte catadromis, omnibus supra viridibus glabris infra albescentibus supra venas rufo-pilosis.

Nom. Jap. *Hiroba-Tô-Nanakamado*.

Hab. in Korea.

Prov. Keihoku: in silvis montis Nanzan montium Kayasan (T. NAKAI, no. 18356, Aug. 12, 1939—typus in Herb. Univ. Imp. Tokyoensis).

248) **Impatiens Textori** MIQUEL in Ann. Mus. Bot. Lugd. Bat. II, 76 (1865).

var. **atrosanguinea** NAKAI, var. nov.

Corolla præter calcar tota atro-sanguinea. Calcar violascens spirale.

Nom. Jap. *Kurobana-Turifunesô*.

Hab. in Korea.

Prov. Keihoku: secus torrente circa Bazyôdô montium Kayasan (T. NAKAI, no. 18425, Aug. 12, 1939—typus in Herb. Univ. Imp. Tokyoensis).

In loco citato hæc varietas solum secus rivulos socialiter crescit, dum in locis aliis ejusdem regionis plantæ typicæ inveniuntur.

249) **Utricularia intermedia** HAYNE in SCHRADER, Journ. I, 18 t. 5 (1801), Choix des Pl. d'Europe IV, 22 Pl. 89 (1802); PALIBIN in Acta Hort. Petrop. XX, 23 (1900); KOMAROV in Acta Horti Petrop. XXV-2, 472 (1907); NAKAI

in Journ. Coll. Sci. Tokyo XXVI, 132 (1911); MORI, Enum. Korean Pl. 320 (1922).

Nom. Jap. *Kotanukimo*.

Hab. in Korea.

Prov. Kanhoku: in humidis circum lacum Syôti (T. NAKAI, no. 18983, Sept. 19, 1940); in torrentis 4 Km. austro-orientale ex oppido Nôzidô (TAMEZÔ MORI, Aug. 1913).

250) **Calpidisca**<sup>(1)</sup> **Takenakai** NAKAI, sp. nov.

Syn. *Utricularia Takenakai* NAKAI in litt. ad YÔ TAKENAKA anno 1937.

Planta pusilla annua, florifera 18–27 mm alta. Folia radicalia rosulatum 3–5 viridia spathulata 1.5–3.6 mm longa 0.8–1.0 mm lata integra. Stolon in nostris speciminibus 1 utriculos 2–3 et folia alterna portat. Utriculus ovatus apice haud constrictus margine oblique truncatus denticulatus albus cum acumine 1.4–2.2 mm longus 0.8–1.0 mm latus. Radices fibrosæ albæ interdum utriculum unicum portant. Scapus 1, 11–23 mm longus ‘Maize-Yellow’ nudus vel 1-bracteatus. Bractea ovato-acutissima basi sagittato-acutissima et 1-dentata 0.8 mm longa. Pedicelli 1.2–2.5 mm longi tenuissimi basi bibracteati. Bracteolus alius indivisus, alius ad medium bifidus acutissimus et si basi ex-appendiculatus 1 mm longus et si appendiculatus 1.2 mm longus. Sepala 2, dorsale 2.5 mm longum, ventrale 2 mm longum, omnia sub lente minute papillosa, ‘Chamois’ sed medio pallide ‘Empire Yellow.’ Corolla biloba, lobo superiore 1.3–1.4 mm alto 1.3 mm lato erecto sordide ‘Light Lavander-Violet’ et basi ‘Micado-Orange’ apice cordato-inciso, lobo inferiore 7 mm longo apice 5 mm lato undulato sordide ‘Light Lavander-Violet’ sed medio longitudine areis binis oblongis 2.2 mm longis 0.7–0.8 mm latis medio longitudine ‘Light Lavander-Violet’-striatis. Calcar horizontali-porrectum triangulari-acutiusculum 6 mm longum 5 mm latum sordide ‘Light Lavander-Violet’ et longitudine intensius 5-striatum.

Nom. Jap. *Tyôsen-Mimikakigusa*.

Hab. in Korea.

(1) *Calpidisca* J. H. BERNHART in Memoire of New York Botanical Garden VI, 55 (1916). et in SMALL, Manual of the Southeastern Flora 1234 (1933).

Prov. Keiki: in herbidis humidis montis Kasan, Suigen (Yô TAKENAKA, Oct. 1936—typus in Herb. Univ. Imp. Tokyoensis).

Additio nova generis est ad genera qua et in Asia orientale et in America orientale communia.

251) **Canna indica** [CLUSIUS, Rar. Pl. Hist. IV, Cap. LIII, LXXXI cum fig. (1601); RIVINUS, Ord. Pl. Monopet. 164 (1690)]; LINNÆUS, Sp. Pl. ed. 1, I, 1 (1753), excl. plant. Africanas & Americanas; Syst. Nat. ed. 10, II, 842 (1759); Sp. Pl. ed. 2, I, 1 (1762), partim; BURMANN fil. Fl. Ind. 1 (1768); OSBECK, Voyage ed. angl. I, 330 (1771); HOUTTUYN, Nat. Hist. II-7, 4 (1777); GÆRTNER, Fruct. & Sem. Pl. I, 37 t. 12 fig. 3 (1788); LOUREIRO, Fl. Cochinch. I, 10 (1790); PERSOON, Syn. Pl. I, 1 (1805); RÖMER & SCHULTES, Syst. Veg. I, 11 (1817); ROSCOE in Trans. Linn. Soc. VIII (A New Arrangement of the Plants of the Monandrian Class usually called *Scitamineæ*) 338 (1807); BLUME, Enum. Pl. Jav. I, 35 (1827); ROXBURGH, Fl. Ind. ed. CAREY I, 1 (1832).

var. **α rubra** AITON, Hort. Kew. ed. 1, I, 1 (1789).

Syn. *Arundo Indica latifolia* BAUHINUS, Pinax 19 no. IX (1623); TABERNÆMONTANI, Neue Vollk. Kräuterbuch 575 cum fig. (1731).

*Canna sive Arundo indica, quibusdam Flos cancri* J. BAUHINUS, Hist. Pl. II Cap. XXIV, 752 cum fig. (1651); RAIUS, Hist. Pl. II, 1202 (1688).

*Arundo indica florida latifolia* MORISON, Pl. Hist. Univ. 250 t. 13 f. 1 (1680).

*Canna d'indica* DURANTE, Herb. Nuovo 88 cum fig. (1684).

*Canna Indica latifolia maxima* HERMANN, Hort. Acad. Lugd.-Bat. 11 (1687), excl. *Canna Indica latifolia humilior* etc. etc.; RAIUS, Hist. Pl. II, 1906 (1688).

*Cannacorus latifolius vulgaris* TOURNEFORT, Instit. rei Herb. 367 (1700); BURMANN, Thesaurus Zeyl. 53 (1737).

*Cannacorus; latifolius; vulgaris* BOERHAAVE, Ind. Alter Pl. II, 127 (1720).

*Canna spathulis bifloris* LINNÆUS, Hort. Cliffort. 1 (1737), excl. syn.

*Canna indica* SLOANE.

*Canna foliis ovatis utrinque acuminatis nervosis* ROYEN, Fl. Leidensis Prodr. 11 (1740); LINNÆUS, Fl. Zeyl. 1 no. 1 (1747), excl. pl. Mexicanas et Brasilienses; Hort. Upsal. 1 no. 1 (1748), excl. syn.

*Cannacorus* RUMPHIUS, Herb. Amboin. V, 177 t. LXXI, fig. 2 (1750).

*Canna indica* a. *C. (rubra)* WILLDENOW, Sp. Pl. I-1, 3 (1797), pro parte?

*Canna chinensis* WILLDENOW, Enum. Horti Reg. Bot. Berol. 2 (1809), quoad pl. ex India orientali.

*Canna orientalis* ROSCOE, Monandr. Pl. Seitam. 7 t. 12 (1828), BOUCHÉ in Linnæa VIII (Mitteilung vieljähriger Beobachtungen über die Gattung *Canna*) 152 (1833); BAKER in Gard. Chron. 3 ser. XIII, 43 (1893); KRÄNZLIN in ENGLER, Pflanzenr. 56 Heft, 47 (1912).

*Canna indica* L. MATSUMURA, Nippon Shokubutsumeii, 37 (1884), Shokubutsu Mei-I, 61 (1895).

*Canna indica* L. var. *C. orientalis* ROSCOE apud BAKER in HOOKER fl., Fl. Brit. Ind. VI-2, 260 (1892).

*Canna indica* L. var. *orientalis* HOOKER fl. apud MATSUMURA in Tokyo Bot. Mag. XII, 2 (1898), Ind. Pl. Jap. II-1, 233 (1905); MATSUMURA & HAYATA in Journ. Coll. Sci. Tokyo XXII, 424 (1906); MAKINO in INUMA, Somoku Dzusetsu rev. & enlarg. ed. I, 1, t. 1 (1907); MATSUMURA, Shokubutsu Mei-I, rev. & enlarg. ed. II, 74 (1916); MAKINO & NEMOTO, Fl. Jap. 1212 (1925), 2 ed., 1605 (1931); NEMOTO, Suppl. Fl. Jap. 1093 (1936).

Nom. Bengal. *Lal Surva-juya* (ex ROXBURGH). Nom. Sundæ. *Puspa nidra* (ex BLUME).

Nom. Jap. *Dandoku*.

In hortis culta, et sæpe in regionibus calidis (e.g. Bonin, Taiwan) elapsa.

***Canna indica* LINNÆUS, var. *flava* ROXBURGH, Fl. Ind. ed. WALLICH I, 1 (1820).**

Syn. *Canna indica* (non LINNÆUS) REDOUTÉ, Liliac. IV, 201 (1808), **syn. nov.**

*Canna orientalis* ROSCOE var.  $\beta$ . *flava* ROSCOE, Monandr. Pl. 7 t. 13 (1828).

*Canna flavescent* LINK, Handb. I, 226 (1829); BOUCHÉ in Linnæa VIII, 149 (1833).

*Canna indica* var. *flava* ROSCOE apud BAKER in HOOKER fil., Fl. Brit. Ind. VI-2, 261 (1892).

*Canna orientalis* ROSCOE var. *C. flavescent* LINK apud BAKER in Gard. Chron. 3 ser. XIII, 43 (1893).

*Canna lutea* (non MILLER) MATSUMURA, Shokubutsu Mei-I, 62 (1895), **syn. nov.**

*Canna flaccida* (non SALISBURY) MATSUMURA, Ind. Pl. Jap. II-1, 233 (1905), **syn. nov.** Nihil aliud.

Nom. Bengal. *Shweta Sur-juya* (ex ROXBURGH).

Nom. Jap. *Kibana-Dandoku* (MATSUMURA).

In hortis colitur.

A number of synonymies laboriously quoted above shows that the first *Canna indica* as well as the *Canna indica* of earlier age is a plant of East-Indies. LINNÆUS who began to mix up the Indian plant with the American plant (*Canna crocea* LAGASCA) was followed by many later botanists, till at last ROSCOE, BOUCHÉ, BAKER and KRÄNZLIN granted the name *Canna indica* to the American plant only (see Monandrian Plants of the order Scitamineae 7; Gardeners' Chronicle 3 ser. XIII, 43 and Pflanzenreich 56 Hept, 59). However, the real *Canna indica* should be the Hindu plant which has two-standing bright red outer staminodes, with entire tips. It can be seen everywhere in the Monsun-region in the wild state. The most common wild form has scarlet flowers (var. *rubra*), but sometimes the flowers become yellowish or reddish yellow as is figured in the figure 201 of REDOUTÉ's Liliacées Tome IV (var. *flava*). *Canna indica* var. *orientalis* and *Canna indica* of Japanese botanists are the variety *rubra*, and *Canna lutea* and *Canna flaccida* are the variety *flava*, as are seen in the specimens and the handwritings on them in the herbarium of Tokyo Imperial University.

252) **Lespedeza melanantha** NAKAI in Tokyo Bot. Mag. XXXVII, 78 (1923), *Lespedeza* Jap. & Korea 57 cum phot. & fig. analyt. (1927).

Nom. Jap. *Kurobana-Kihagi*.



Hab. in Japonia.

Hondo, Prov. Mikawa: tractus Kita-Sidara, oppidus Miwa, Kawai (KI-ITI TORII, Jul. 28, 1940).

Kyusyu, Prov. Higo: tractus Kuma, oppidus Watari (KANZIRÔ MAYEBARA, no. 2114, Oct. 26, 1924); Prov. Tusima, tractus Simo-Agata, Mons Siratake (KAZUWO NAKAZIMA, Aug. 1, 1933).

Planta ad floram Japonicam propriam nova est.

253) ***Alnus traveculosa*** HANDEL-MAZZETTI in Anz. Akad. Wissenschaft, Wien, Mathem.-Naturw. Klasse LIX, 51 (1922), Symb. Sinicæ, VII, 21 (1929). Syn. *Alnus Jackii* HU in Journ. Arnold Arboret. VI-3, 140 (1925); REHDER in Journ. Arnold Arboret. VIII-1, 96 (Jan. 1927); HU, Icon. Pl. Sin. I, 16 Pl. 16 (Feb. 1927).

*Alnus Naguræ* INOKUMA & MOMIYAMA in Journ. Jap. Forestry Soc. XIX-6, 379 cum fig. (1937), **syn. nov.**

Nom. Chin. 加氏赤楊

Nom. Jap. *Sakuraba-Hannoki*.

Hab. in Japonia.

Hondo. Prov. Mikawa: Seto (TAI-ITI INOKUMA, type of *Alnus Naguræ* in the herbarium of Forestry Institute, Faculty of Agriculture, Tokyo Imperial University).

Prov. Aki: tractus Kamo, oppidus Gôbara (FUMIO MAEKAWA no. 57-813, Jul. 28, 1935).

Area distr.: China (Hupeh, Anhwei, Fokien, Chekiang), Nippon (Hondo-media & oceid.).

Not so long after the publication of *Alnus Naguræ*, MOMIYAMA has noticed that it is being conspecific with the Chinese *Alnus traveculosa*. However, he is too shy to correct it against INOKUMA.

254) ***Costus speciosus*** (KOENIG) J. E. SMITH var. ***leiocalyx*** (K. SCHUMANN) NAKAI, comb. nov.

Syn. *Costus arabicus* LINNÆUS, Sp. Pl. I, 2 (1753), pro parte; JACQUIN, Icon. Pl. Rar. I, t. 1 (1781); Collect. ad Bot. I, 143 (1786);

WILLDENOW, Sp. Pl. I-1, 2 (1797).

*Banksea speciosa* KOENIG in RETZIUS, Observ. III append. (Descriptiones Monandrarum) 75 (1783).

*Hellenia grandiflora* RETZIUS, Observ. VI, 18 (1786).

*Amomum arboreum* LOUREIRO, Fl. Cochinch. I, 7 (1790).

*Tsiana speciosa* GMELIN, Syst. Nat. II-1, 9 (1791).

*Amomum hirsutum* LAMARCK, Illus. I, 5, t. 3 (1791).

*Costus speciosus* J. E. SMITH in Trans. Linn. Soc. I, 249 (1800);  
 PERSOON, Syn. Pl. I, 3 (1805); BLUME, Enum. Pl. Jav. I, 61 (1827);  
 PAXTON, Mag. IV, t. col. 245 (1838).

*Costus Vaginalis* SALISBURY Mss ex SALISBURY in Trans. Hort. Soc. London I, 277 (1812).

*Costus nepalensis* ROSCOE, Monandr. Pl. t. 80 (1828); REGEL, Gartenflora IV, 341, t. col. 139 (1855); HORANINOV, Monogr. 37 (1862).

*Costus Loureiri* HORANINOW, l. c. 39.

*Costus speciosus* var. *C. nipaulensis* ROSC. apud BAKER in HOOKER fil., Fl. Brit. Ind. VI-xviii, 250 (1892).

*Costus speciosus* var. *sericea* (BLUME) K. SCHUMANN subvar. *2. leiocalyx* K. SCHUMANN in ENGLER, Bot. Jahrb. XXVII, 344 (1899); in ENGLER, Pflanzenr. 20 Heft (IV 46) 399 (1904).

Folia discoloria oblongo-lanceolata subtus sericea. Calyx præter costas pilosellas glaber.

Nom. Jap. *Kinuge-Hozaki-Ayame*.

Hab. in Formosa.

Prov. Taityû: tractus Nantô, oppidus Syasisyô (TAKIYA KAWAKAMI & USINOSUKE MORI no. 1237, Aug. 13, 1905).

This is a new addition to the Formosan flora. There are no specimens which were cited in the enumeration of MATSUMURA and HAYATA in the herbarium of Tokyo Imperial University, and I can not realize what kind of plants they had really meant of *Costus speciosus*.

***Costus speciosus*** J. E. SMITH var. ***hirsutus*** BLUME, Enum. Pl. Jav. I, 61 (1827); K. SCHUMANN in ENGLER, Bot. Jahrb. XXVII, 343 (1899); in ENGLER, Pflanzenfam. 20 Heft (IV 46) 398 (1904).

Folia subconcoloria oblongo-lanceolata subtus sparsius pilosa. Calyx glaber.

Nom. Jap. *Ô-Hozaki-Ayame*.

Hab. in Formosa: in collibus Takao (A. HENRY no. 1204).

255) **Costus formosanus** NAKAI, sp. nov.

Syn. ? *Costus speciosus* var. *angustifolius* (non KER) K. SCHUMANN in ENGLER, Bot. Jahrb. XXVII, 343 (1927); in ENGLER, Pflanzenr. 20 Heft (IV, 46) 398 (1904).

Folia concoloria lanceolata vel lineari-lanceolata. Calyx glaberrimus.

Nom. Jap. *Hosoba-Hozaki-Ayame*.

Hab. in Formosa.

Prov. Takao, tractus Heitô (vel olim Akô), oppidus Datetu (T. SÔMA, Aug. 1919, fructifera).

Owing to the lack of flowers I can not identify our specimen with SCHUMANN's variety, which may possibly be the same sort. SCHUMANN used varietal name *angustifolius* for the Borneo plant with narrow glabrous leaves. This name however, is cancelled by the earlier homonym *Costus speciosus*  $\beta$ . *angustifolius* KER in EDWARDS, Bot. Regist. VIII, t. 665 (Nov. 1, 1822). KER's *angustifolius* (forsan var. *angustatus* BLUME, l.c.) seems to be one form of variety *argyrophyllus* WALLICH with more densely sericeous leaves. It is said that the seeds were sent to Lord CAERNARVON by WALLICH from the botanic garden of Calcutta.

Above three *Costi* are distinguished from each other in the following way.

{	Folia oblongo-lanceolata pilosella—sericea. Calyx praeter costas pilosas glaber.	
	{ Folia subtus sericea discoloria. ....	<i>Costus speciosus</i> var. <i>leiocalyx</i> .
	{ Folia subtus sparsius pilosa subconcoloria. ....	<i>Costus speciosus</i> var. <i>hirsutus</i> .
	Folia concoloria lanceolata vel lineari-lanceolata glaberrima. Calyx glaberrimus. ....	<i>Costus formosanus</i> .

The genus *Costus* together with *Dimerocostus*, *Monocostus*, and *Tapeinochilus* make a group deserving a rank of family, if not so remarkable, among *Amomales*. The relation among the families of *Amomales* are briefly sketched as follows.

**Amomales** LINDLEY, Nat. Syst. Bot. 322 (1836); Veget. Kingdom ed. 1, 162 (1846).

Syn. *Scitamineæ* LINK, Enum. Pl. Hort. Berol. I, 1 (1821), nom. sensu amplif.

*Scitaminearum* L. Gen. Pl. ed. 6, appendix, Ord. Nat. n. VIII;

BARTLING, Ord. Nat. Pl. 24 & 59 (1830); ENDLICHER, Gen. Pl. I, 221 (1837), etc. etc.

*Scitamineæ (Arillatæ)* ENGLER, Syllab. ed. 1, 87 (1892); ed. 2, 95 (1898); ed. 3, 101 (1903), etc. etc.

*Zingiberales* HUTCHINSON, Fam. Flow. Pl. II, 71 (1934).

Herbæ cum rhizomate incrassato vel rarius arbores. Folia disticha vel rarius alterna (*Musaceæ*, *Costaceæ*), cum vaginis elongatis vulgo fibrosis pseudocaulum formant, lamina pinnatinerve. Inflorescentia terminalis vel in gemma propria, cum bracteis distichis vel alternis. Flores in quaque bractea 1-∞, hermaphroditi vel monoeci (*Musaceæ*, *Kæmpferia natalensis*), ovario infero, vulgo zygomorphi spicati vel spicatum ramosi vel racemosi vel paniculati rarius solitarii. Tepala 6, heteromorpha vel homomorpha basi vulgo plus minus connata. Stamina 5 vel 4 vel reductum 1. Staminodia corollacea vel nulla. Ovarium inferum 1-3 locale cum placentis axillaribus vel parietalibus (*Zingiberaceæ-Globbaeæ*, *Costaceæ-Dimerocostus*) vel basalibus (*Heliconiaceæ*, *Marantaceæ*). In placentis axillaribus ovula numerosa 3-oligoserialia vel 1-4-serialia horizontalia. In placentis basalibus ovula 3-2 vel 1 erecta. Integumenta 2. Fructus sæpe capsularis et loculicide dehiscens, interdum carnosus indehiscens, rarius baccatus vel in nuce. Semina arillata vel inarillata, operculata vel inoperculata, cum perispermio et endospermio sæpe farinoso. Embryo brevis vel elongatus vel fungosus.

- |   |   |  |
|---|---|--|
| 1 | { | Stamina perfecta 4-5. Antheræ biloculares. Staminodium 1 vel nullum. ... 2   |
|   |   | Stamen fertile unicum. Antheræ mere biloculares vel pseudo-uniloculares. Staminodia 0-5. .... 5  |
| 2 | { | Folia et bracteæ alterna. Flores monoeci in quaque bractea oligo- vel polymeri horizontali 1-3 seriales, in bracteis basalibus hermaphroditi et in bracteis apicalibus masculi. Calycis tubus adaxiali-longitudinali-apertus, limbi label- lum trilobum intra lobos lobulus unicus vel tepalum interius (2) portant. Tepalum interius unicum labellum oppositum. Fructus carnosus indehiscens. Semina inarillata. .... <i>Musaceæ</i> J. ST. HILAIRE. <sup>(1)</sup> |

(1) *Musaceæ* (ex parte) J. ST. HILAIRE, Exposit. Fam. Pl. I, 151 t. 23 (1805);

- Folia et bracteæ disticha. Flores hermaphroditi. Fructus capsulares loculicide dehiscentes ..... 3
- 3 { Ovula in quoque ovarii loculo 1 basifixæ erecta. Semina exarillata. Flores zygomorphi sed nunquam labellum formant. Stigma solitarium capitatum vel clavatum. Herbæ perennes. .... *Heliconiaceæ* NAKAI. (2)
- 3 { Ovula in placentis axillaribus 3-oligoseriata numerosissima. Semina arillata. Stigma trifidum. .... 4
- 4 { Tepala libera vel basi parce connata. Petalum adaxiale aliis minus et labellum non format. Herbæ perennes magnæ, vel frutices vel arbores. .... *Strelitziaceæ* HUTCHINSON. (3)
- 4 { Tepala basi tubum formant. Petalum adaxiale aliis majus et labellum format. Herbæ perennes magnæ, acaules. Folia omnia radicalia. Flores axillares 1 (2-3). .... *Lowiaceæ* RIDLEY. (4)

AGARDE, Aphor. 180 (1823); A. RICHARD, Nouv. Élé. ed. 4, 436 (1828); BARTLING, Ord. Nat. Pl. 24 & 62 (1830); ENDLICHER, Prodr. Fl. Norfolk. 34 (1833); LINDLEY, Nat. Syst. Bot. 326 (1836); etc. etc.

Syn. *Scitamina* L. Phil. Bot. ed. 1, 27 (1751), partim.

*Zingiberes* ADANSON, Fam. Pl. II, no. 61 (1762), partim.

*Scitamineæ* (partim) L. Gen. Pl. ed. 6, Ord. nat. n. VIII (1764); Praelect. Ord. nat. Pl. ed. GISEKE 118 (1792).

*Musæ* (partim) DURANDE, Not. Élé. Bot. 257 (1781); JUSSIEU, Gen. Pl. 61 (1789).

*Scitamineæ* c. *Musaceæ* REICHENBACH, Consp. Reg. Veg. II, 197 (1828), partim.

*Musaceæ* Trib. *Uranieæ* (partim) A. RICHARD, De Musaceis 11 (1831); MEISNER, Pl. Vasc. Gen. I, 390 (1836); ENDLICHER, Gen. Pl. I, 227 (1837); SPACH, Hist. Vég. XII, 136 (1846).

Gen. 1. *Musa* L.

(2) *Heliconiaceæ* NAKAI, fam. nova.

Syn. *Musaceæ* Trib. 1. *Heliconieæ* A. RICHARD, Musac. 13 (1831); MEISNER, Pl. Vasc. Gen. I, 389 (1836); ENDLICHER, Gen. Pl. I, 228 (1837); SPACH, Hist. Vég. XII, 136 (1846); K. SCHUMANN in ENGLER, Pflanzenr. IV-45, 33 (1900).

*Strelitziaceæ* HUTCHINSON, Fam. Flow. Pl. II, 72 (1934), partim.

Gen. 1. *Heliconia* L.

(3) *Strelitziaceæ* HUTCHINSON Fam. Flow. Pl. II, 72 (1934), excl. *Heliconia*.

Syn. *Musaceæ* Trib. II. *Uranieæ* (ex parte) A. RICHARD, De Musaceis 11 (1831); MEISNER, Pl. Vasc. Gen. I, 390 (1836); ENDLICHER, Gen. Pl. I, 228 (1837).

(4) *Lowiaceæ* RIDLEY in Trans. Linn. Soc. 2 sér. (Botany) III, 383 (1893), nom. nud.; Fl. Malayan Penins. IV, 291 (1924), cum diagn.; HUTCHINSON, l. c. 73.

Syn. *Musaceæ-Lowieæ* K. SCHUMANN in ENGLER, Nachtrag I, 89 (1897).

*Musaceæ* Unterfam. *Lowioideæ* K. SCHUMANN in ENGLER, Pflanzenr. IV-45, 40 (1900); WINKLER in ENGLER, Pflanzenfam. 2 Aufl. 15 a, 541 (1930).

- Ovarium 1 vel 2 vel 3-loculare cum ovulis basifixis 3 (2-1). Flores hermaphroditi, spicati vel paniculati vel spicato-ramosi. Sepala 3 imbricata. Petala 3 contorta. Staminodia exteriora corollacea, interiora 1 cucullatum, 1 callosum. Nectaria suprasedalia. Stamen interius 1 fertile cum staminodio calloso affixum. Antherae pseudo-uniloculares. Herbae perennes cum foliis distichis. Fructus capsularis vel nuceus vel baccatus. Semina arillata rarissime operculata. .... *Marantaceae* LINDLEY.<sup>(5)</sup>
- Ovarium 1-3 loculare cum placentis parietalibus vel axillaribus  $\infty$ -ovulatis, ovulis 1-4 serialibus. .... 6
- Stylus planus incrassatus apice oblique stigmatosus. Sepala 3 libera. Petala 3 basi connata. Staminodia exteriora si adsunt 2-3 corollacea. Staminodium interius aliud saepe recurvatum et pseudo-labellum format, aliud erectum cum stamine fertile connatum. Anthera unica libera pseudo-unilocularis. Herbae perennes cum rhizomate incrassato, foliis distichis basi alte vaginantibus. Flores spicati cum bracteis parvis. Ovula in quodque placento biserialia. Semina inarillata sed operculata. .... *Cannaceae* LINK.<sup>(6)</sup>
- Stylus elongatus tenuis in canali staminis fertilis insertus. Stamen fertile

(5) *Marantaceae* LINDLEY, Nat. Syst. Bot. 324 (1836), excl. *Canna*.

Syn. *Cannae* DURANDE, Notions Élém. Bot. 258 (1781), partim.

*Cannae* R. BROWN, Prodr. Fl. Nova Holland. I, 307 (1810), in observ. excl. *Canna*.

*Marantae* R. BROWN in FLINDERS' Voy. (1814), ex LINDLEY, l. c.

*Scitamineae* b. *Cannaceae* REICHENBACH, Consp. Reg. Veg. 70 (1828), partim.

*Cannaceae* (ex parte) AGARDH, Aphor. 181 (1823); DUMORTIER, Analyse 56 (1829); BARTLING, Ord. Nat. Pl. 24 & 61 (1830); ENDLICHER, Gen. Pl. I, 225 (1837).

*Cannaceae* Trib. *Cannae* MEISNER, Pl. Vasc. Gen. I, 389 (1836), excl. *Canna*.

*Cannaceae* Trib. *Marantae* MEISNER, l. c.

(6) *Cannaceae* LINK, Enum. Pl. Hort. Reg. Berol. I, 1 (1821), cum diagn. breve.

Syn. *Zingiberes* ADANSON, Fam. Pl. II, 61 (1763), pro parte.

*Cannae* (ex parte) DURANDE, Not. Élém. Bot. 258 (1781); JUSSIEU, Gen. Pl. 62 (1789).

*Drymyrrhizae* VENTENAT, Tab. Règne Vég. II, 203 (1799), partim.

*Amomeae* J. ST. HILAIRE, Exposit. Fam. Nat. I, 154 (1805), partim.

*Cannae* R. BROWN, Prodr. Fl. Nova Holland. I, 307 (1810) in observ. excl.

*Maranta*; etc. etc.

*Scitamineae* b. *Cannaceae* (ex parte) REICHENBACH, Consp. Reg. Veg. 70 (1828); LINK, Handb. I, 223 (1829).

*Marantaceae* LINDLEY, Nat. Syst. Bot. 324 (1836), pro *Canna* tantum.

*Cannaceae* Trib. *Cannae* MEISNER, Pl. Vasc. Gen. I, 389 (1836), excl. *Myrosma*.

*Scitamineae* Trib. III. *Cannae* BENTHAM & HOOKER, Gen. Pl. III-2, 654 (1883).

- labellum oppositum. Calyx tubulosus. Corolla infundibularis trilobata, lobo postico labellum formante. Capsula loculicide dehiscens. Ovula 2-4 (1) serialia. Semina arillata et operculata. .... 7
- Pars epigæa non aromatica. Folia alterna vel quadriserialia. Nectarium erectum nullum sed ut *Marantaceæ* suprasedale depressum. Loculus antherarum sæpe apice appendiculatus. Ovarium 3-loculare cum placentis axillaribus vel biloculare cum placentis parietalibus lateralibus vel septalibus. Ovula 2 (1) serialia. .... *Costaceæ* NAKAI. (7)
- 7 } Planta aromatica. Folia disticha. Nectaria 2 opposita erecta magna integra vel lacerata. Loculus antherarum apice muticus. Ovarium 3 (2-1) locale, et si uniloculare placentis parietalibus. Ovula 2-4 serialia. .... *Zingiberaceæ* L. C. RICHARD. (8)

(7) *Costaceæ* NAKAI, fam. nova.Syn. *Scitamineæ* Sect. 4. *Costæ* BLUME, Enum. Pl. Jav. I, 41 (1827), cum diagn.*Scitamineæ* Sect. 4. *Costi* BLUME, l. c. 61 (1827), nom.*Zingiberaceæ* Sect. *Costi* BLUME apud ENDLICHER, Gen. Pl. I, 225 (1837).*Zingiberaceæ* Trib. *Costæ* MEISNER, Pl. Vasc. Gen. I, 289 (1836).*Zingiberaceæ* Subfam. *Costoideæ* K. SCHUMANN in ENGLER, Bot. Jahrb. XXVII, 265 (1899); in ENGLER, Pflanzenr. 20 Heft (IV 46) 377 (1904).Genera, 4. *Costus* L., *Dimerocostus* O. KUNTZE, *Monocostus* K. SCHUMANN, *Tapeinochilus* MIQUEL.(8) *Zingiberaceæ* (ex parte) L. C. RICHARD, Demonstr. Bot. 36 (1808), LINDLEY, Nat. Syst. Bot. 322 (1836), etc. etc.Syn. *Scitamina* LINNÆUS, Phil. Bot. 27 (1751), pro parte, HOUTTUYN, Naturlyke Hist. II-1, 177 (1773), partim.*Spathacei*, *spathæ univalves*, *spadice spathaceo* LINNÆUS, Gen. Pl. ed. 2, appendix, Methodus Calycina (1743), partim.*Zingiberes* ADANSON, Fam. Pl. II, 61 (1763), partim.*Scitamineæ* (ex parte) LINNÆUS, Gen. Pl. ed. 6, appendix, Ord. Nat. n. VIII (1764), Prælect. Ord. Nat. Pl. ed. GISEKE 118 (1792); etc. etc.*Cannæ* (ex parte) DURANDE, Not. Élém. Bot. 258 (1781); JUSSIEU, Gen. Pl. 62 (1789).*Drymyrrhizæ* VENTENAT, Tabl. Règne Vég. II, 203 (1799), partim.*Amomeæ* J. ST. HILAIRE, Exposit. Fam. Nat. I, 154 (1805), ex parte, etc. etc.*Zingiberæ* (partim) SALISBURY in Trans. Hort. Soc. London I, 279 (1815); MEISNER, Pl. Vasc. Gen. I, 290 (1836).*Alpiniaceæ* LINK, Handb. I, 228 (1829), partim.*Scitamineæ* a. *Amomeæ* REICHENBACH, Consp. Regn. Veg. 70 (1828).*Curcumaceæ* DUMORTIER, Analyse Fam. Pl. 56 (1829), partim.*Amomaceæ* HORANINOW, Prodr. Monogr. Scit. 19 (1862), partim.*Scitamineæ* Trib. I. *Zingiberæ* BENTHAM & HOOKER, Gen. Pl. III-2, 637 (1883), partim.

## 解 説

246) さくらゐさうハ明治 36 年ニ牧野博士ガゆり科ノ一新屬トシテ精密ニ記述圖解シ三好學教授ト採集者櫻井半三郎氏トヲ記念シテ *Miyoshia Sakurii* トイフ一石二鳥ノ學名ヲ附ケタノdeal。其折博士ハ之ガそくしんらん屬ニ近イガ相當異リ獨立ノ一科 *Miyoshiaceae* ヲ建テテモヨカラウト附言シタ。然ルニ同年博士ハ之ヲ Borneo 産ノ *Petrosavia* 屬ト同屬ト考ヘテ其ニ移サウトシタガ屬名 *Miyoshia* ノヤリ場ニ窮シ *Petrosavia Miyoshia-Sakurii* トイフ名ヲ作り其異名ニ *Protolirion Miyoshia-Sakurii* ナル名ヲ加ヘタ。此ハ然シ今日アル植物命名規則ニハ抵觸スル。而シテ科名迄ヲ *Protoliriaceae* ト變ヘ其異名ニ *Petrosaviaceae* ナルモノヲ用意シタ。此事タルヤ博士ノ日頃ノ言動ニ似合ハヌヤリ方デアツタ許リデナク徒ニ異名ヲ多ク作ツタコトニモナツタ。言ヒ換ヘレバ *Miyoshia* ガ見方ニヨツテハ *Petrosavia* 屬トモ見ラレ 又ハ *Protolirion* 屬トモ見ラレル懼レガアルカラ其場々々ニ自分ノツケタ名ガ役立ツ様而シテ三好教授ヲ記念シタコトガ消滅シナイ様ニシタノdeal。然シ三好教授ヘノ厚意ヲ除外スレバ如何ニモ自信ノナイヤリ方ト謂ハネバナラス。當時ハ萬國命名規則モ不備デアリ徹底シテ居ナカツタカラ其レデモ通ツタガ今デハ通ラス。其爲メ *Protolirion Sakurii* DANDY ナル訂正ガ行ハレル様ニモナツタ。愛知縣熱田中學ノ加藤新市氏ハ以前カラさくらゐさうニ趣味ヲ持チ多數ノ標本ヲ予ニ送ラレタコトガアル。予ハ其ヲ全部東大ノ植物學教室腊葉庫ニ納メタコトハ勿論dealルガ既ニ牧野博士ガ立派ニ研究濟ノモノ故、今一度見直ス氣ニハナラズ今日迄過ギタガ或動機カラ疑問ガ起リ Borneo 産ノ *Petrosavia stellaris* ト馬來半島産ノ *Protolirion paradoxum* ト支那廣西省産ノ *Protolirion Sinii* トニツイテ再檢討ヲシテ見タラ大分文句ヲ言ヒタイコトガ出テ來タ。其ヲツツメテ言フトさくらゐさう屬 *Miyoshia* ハ立派ナ獨立屬デアリ *Petrosavia* モ *Protolirion* モ各獨立ノ屬タル資格ガアル。其三屬ノ區別ハ

子房上位、心皮ハ全然離生、花ハ繖房花序ヲナシ小花梗ハ長ク、小苞ナシ。雄蕊ハ花被片ノ基部ニツク、莖葉ハ葉鞘ナシ。 ..... *Petrosavia* BECCARI.

子房ハ半上位、心皮ノ基部ハ相互ニモ癒合ス。

莖葉ハ筒狀ノ葉鞘ヲ有ス、花ハ繖房花序、小花梗ハ長ク小苞ナシ、花絲ハ子房ノ背面ニ癒合ス、 ..... *Protolirion* RIDLEY.

莖葉ハ葉鞘ヲ欠グ、花ハ總狀花序ヲナス。小花梗ハ短ク花トホボ同長、1-2 個ノ小苞アリ。雄蕊ハ花被片ノ基部ニツケドモ内列ノ 3 個ノ花絲ハ花被片ト心皮トノ間ヨリ出デ基ハ双方ヘック。 ..... *Miyoshia* MAKINO.



・而シテ *Petrosavia* 屬ニハ *Petrosavia stellaris* BECCARI 1種ガアリ Borneoニ産シ、*Protolirion* 屬ニハ *Protolirion paradoxum* RIDLEY 1種ガアリテ馬來半島特産、*Miyoshia* 屬ニハさくらむさう *Miyoshia Sakurawi* MAKINO ト支那廣西省ノ *Protolirion Sinii* KRAUSE ガ *Miyoshia Sinii* NAKAI ト改名サレテ之ニ屬スルコトニナル。

次ニ此等ノ3屬ハ何科ニ屬スルカトイフニ花ノ構造殊ニ腹面ノ裂開スル蒴ヲ有スルコトカラハばいけいさう科 *Melanthaceae* R. BROWN ノいはぜきしよう族 *Tofieldieae* 又ハばいけいさう族 *Veratrieae* ニ近イケレドモ子房ノ各室ニ數列ノ卵子ガツクコトハ *Asparagaceae*, *Ruscaceae*, *Smilacaceae*, *Trilliaceae*, *Convallariaceae*, *Melanthaceae*, *Liliaceae*, *Ophiopogonaceae*, *Gilliesiaceae*, *Peliosanthaceae*, *Aspidistraceae*, *Aloinaceae*, *Dracænaceae*, *Colchicaceae*, *Asphodelaceae*, *Nolinaceae*, *Agavaceae*, *Xanthorrhoeaceae* 等々ヲ含ム ゆり目 *Liliales* ニハ見ラレナイ特徴デアル。以上ノ *Liliales* ノ諸科ハ皆ニ様ニ2-多數ノ卵子ガ縦ニ2列ニツイテ居ル。*Agapanthaceae*, *Amaryllidaceae* 等ノひがんばん目植物 *Amaryllidales* モ *Ixiales* LINDLEY (*Iridales* ENGLER) ノあやめ科植物 *Iridaceae* モ同様デアルカラ *Miyoshia* 群トハ異ル。又 *Geosiridaceae* デハ樹枝狀ニ分レタ胎坐ノ枝ノ先ニ卵子ガツクカラ同ジ菌根植物デアツテモ子房下位ナル點カラモ *Miyoshia* 一群トハ異ル。又 *Aphyllanthaceae* デハ子房ハ上位デアルケレドモ1個宛ノ卵子ガ各室ニアルカラ是亦同一群デハナイ。其レカラ みづあふひ目 *Pontedercales* ノ *Pontederaceae*, あななす目 *Bromeliales* ノ *Tillandsiaceae* 並ニ *Hæmodorales* デハ *Miyoshiaceae* 同様數列ノ卵子ガ各胎坐ニアルケレドモ子房ガ完全ニ癒合シ胞背裂開又ハ胞間裂開スルカ又ハ子房下位デアルカラ其等トモーツニハナラス。又種子ノ小サイ點ハ一見ひなのしゃくじゃう目 *Burmanniaceae* ヤらん目 *Orchidales* ノ植物ノ様デアルガ多胚乳ノ點デ異ルカラ *Miyoshiaceae* ハ *Melanthaceae* ノ隣ニアツテ *Liliales* トハ別ニ *Miyoshiales* ヲナスト見ルガ正當ダト思フ。HUTCHINSON 氏ハおもだか目 *Alismatales* ニ加ヘテほろむいさう科 *Scheuchzeriaceae* ニ近イトイフケレドモ唯心皮ガ開出シ腹面デ裂開スルトイフダケガ同ジデ托葉狀ノ葉鞘部ヲモツコト、基生卵子ヲモツコト、花柱ナキコトナドハ *Miyoshiaceae* ニハ見ラレヌ點デアル。故ニ *Miyoshiaceae* ノ植物ハ矢張り、ENGLER, KRAUSE, DIELS, LOTSY ナドノ考通りニ *Melanthaceae* ニ最モ近クテシカモ異ナル一群デアル。

247-249) 慶尙北道伽倻山産ノたうななかまど *Sorbus amurensis* KOEHNE ノ小葉片ノ大ニ廣イひろはたうななかまど var. *latifoliolata* ト同山産ノくろばなつりふねさう *Impatiens Textori* var. *atrosanguinea* ト新稱スル花冠ノ黒紫色

ノつりふねさうト、北鮮ニこたぬきも *Utricularia intermedia* HAYNE ノアルコト HAYNE 著 *Choix des plantes d'Europe* ガ手ニ入り其精密ナル彩色圖ト比較シテこたぬきもノ學名ハ從來用キテ來タ *Utricularia intermedia* デヨカツタユトヲ報告シテアル。

### *Canna Indica.*

250) 昭和11年ノ10月ニ京城大學豫科教授竹中要氏ガ水原ノ華山デ發見シタ小サイみみかきぐさノ一種ハ北米ノ東部ニ限り産スルト謂ハレテ居タ *Calpidisca* トイフ屬ニ入ル小サイ草デアアル。其特徴ハ匙狀綠色ノ根出葉ガ1-2枚宛出デ花莖ニハ苞ガ1個アル。此苞ハ卵形デ先ハ鋭ク尖リ附着點カラ下ヘ簇形ノ突起ガアル。花ハ1個紅紫色、小花梗ニハ2小苞アリ萼ハ2個上下ニ附キ微粒狀ノ突起ガ一面ニアル。距ハ水平ニ前方ニ突出スル *Calpidisca Takenakai* てうせんみみかきぐさと命名スルガ本屬モ亦東亞ト北米ノ東部トガ共有スル屬群ニ新ニ加フベキ1屬デアアル。

251) だんどくノ學名ハ我國デハ *Canna indica* L. var. *orientalis* BAKER トイフコトニナツテ居ルガ其シナ名ハ實ハ BAKER 氏ハ作ツテ居ナイ。一體 *Canna indica* ナル名ヲだんどくニ附ケタ



第1圖 CAROLUS CLUSIUS 著 *Rariorum Plantarum Historia* (1601 年版)ニ始メテ出タだんどくノ圖ヲ復寫ス(實大)。

ノハ和蘭ノ CLUSIUS 氏デアリ慶長 6 (1601) 年其著 *Rariorum Plantarum Historia* 第 4 卷第 90 章 81 頁ニ其名デ圖解シタノヲ以テ始メトスル。(挿圖 1 参照) 其ヲ其儘屬名ト種名トニ採用シタノガ LINNÆUS 氏寶曆 3 (1753) 年デアル。然シ LINNÆUS 氏ハ北米ノ種デ其後 *Canna crocea* LAGASCA トイフ名ノツイタモノヲ同一種ニ取扱ツテ居タ。寛政元 (1789) 年ニハ英國ノ AITON 氏ハ之ニ *Canna indica* a. *rubra* AITON ノ名ヲ與ヘテ黃色ノ花ヲ附ケルモノト區別シタ。此名ガだんどくノ正シイ學名デアル。其後文政 11 (1828) 年ニ ROSCOE 氏ガ LINNÆUS 氏ノ混同シタ 2 種ノ中北米産ノ方ニ *Canna indica* L. ノ名ヲ持ツテ行キだんどくニハ新ニ *Canna orientalis* ROSCOE ナル名ヲ用キタ。之ニ盲從シタ學者モ相當ニアリ明治 45 (1912) 年ニ獨乙ノ KRÄNZLIN 氏ガ Pflanzenreich ニだんどく科ヲ書イタ時ニモ其名ヲ用キタカラ尙更此名ガ流用サレル様ニナツタケレドモ其ハ間違ツテ居ル。又 *Canna indica* var. *orientalis* BAKER ナル間違ガ起ツタ因ハ明治 25 年ニ BAKER 氏ガ HOOKER 氏監修ノ *Flora of British India* 4 卷第 2 部 260 頁ニだんどくヲ書イタトキニ「*Canna orientalis* ROSCOE ニ當ルだんどくノ一變種」トイフ意味デ *Canna indica* L. var. *C. orientalis* ROSCOE トイフ學名ヲ記シタノヲ明治 31 年ニ松村先生ガ植物學雜誌 12 卷第 2 頁ニ *Canna indica* L. var. *orientalis* BAKER ト御書キニナツタノガ最初デアル様デアル。此名ガ帝國植物名鑑 (明治 38 年)、臺灣植物目錄 (明治 39 年)、草木圖說增訂版 (明治 40 年) 等以後ニ用キラレテ今日ニ及ンデ居ルノデ皆日本學者ノ誤デアル、殊ニ名鑑ニハ明治 26 (1893) 年ニ *Gardeners' Chronicle* 紙上デ BAKER 氏ガ此名ヲ用キタ様ニ引用シテアルガ其ハ全クノ誤デ BAKER 氏ハ單ニ *Canna orientalis* ROSCOE ノ學名ヲ用キタニ過ギナイ。斯様ナコトハ文献ヲ揃ヘテモ其ニ當ツテ見ル所ノ大手數ヲカケスト判ラスコトデアルケレドモ仲々頼ンデモヤツテ呉レル人モナイカラ自ラ其衝ニ當ツタノデアル。だんどくと同じ小サイ花ヲ咲キ黃色ノガアル其ハ今花壇ヤ切花デ見ル大輪ノ黃花ノだんどくとハ全クノ別物デアル。其ハ *Canna indica* L. var. *flava* ROXBURGH 文政 3 (1820) 年發表デアル。名鑑以後ニ *Canna flaccida* SALISBURY ガ用キテアルガ其ハ節 *Section* カラ異ナル種デアル。尙ホ *Canna iridiflora* RUIZ & PAVON ヲたいりんだんどくノ學名ニ用キルノモ大變ニ誤デ我邦ニ園藝家ノ植エテ居ルたいりんだんどくハ *Canna* ノ園藝雜種デアル。 *Canna iridiflora* トイフノハ筒ノ長イ垂レ下ル紅イ花ヲ咲クモノデアル。

253) くろばなきはぎ *Lespedeza melanantha* NAKAI ハ朝鮮デハ忠北俗離山以南ニアルコトガ知レテ居ルガ其レガ内地ニモアル。對馬デ中島一男學士ガ採集

シ肥後球磨郡渡<sup>ワダリ</sup>デハ前原勘次郎氏ガ採リ、三河國北設樂郡三輪村デ鳥井喜一氏ガ採ツテ居ル、三河ノ標本ハ農林省ノ林(舊姓加藤)彌榮氏ガ持來サレタ。

254) 三河國デ見附カツタさくらばはんのき *Alnus Nagura* INOKUMA & MOMIYAMA (昭和 12 年發表) トイフ種ハ支那ニアル *Alnus traveculosa* HANDEL-MAZZETTI (大正 11 年發表) ト同種デアル。此事ハ榎山君ハ發表後東大理學部腊葉庫ニアル支那ノ *Alnus traveculosa* ノ標本ヲ見テ氣附イタノデアツタガ猪熊君ニ遠慮シテ發表セズ其儘數年ヲ經タカラ予ガ代ツテ發表シテ置ク。

255) 臺灣ニおほほざきあやめトイフ植物ガアル。其學名ニ *Costus speciosus* (RETZIUS) SMITH トイフ名ガ用キラレテ居ル。然シ HENRY 氏ガ臺灣デ採ツタノハ SCHUMANN 氏ノ研究デ *Costus speciosus* var. *hirsutus* BLUME 即チ BLUME 氏ガ文政 10 (1827) 年ニ其著 Enumeratio plantarum Javæ et Insularum Adjacentium I 卷第 61 頁ニ *Costus speciosus* B. var. *hirsutus* ト書イテ發表シタモノニ當ル、葉裏ニ薄イ毛ノアルモノデアル。早田氏ガ松村先生ト共著ノ臺灣植物目錄ニ引用シタ其他ノ標本ハ行衛不明デアルカラ早田氏ガドンナ植物ヲ同定シタカ今ハ判ラス。東大ニ今アル二ツノ標本ハ早田氏ガ一度モ引用發表シタコトノナイモノデアリ其中一ツ森丑之助氏ガ明治 38 (1905) 年ニ南投郡社仔庄デ採ツタノハ SCHUMANN 氏ガ *Costus speciosus* var. *sericeus* subvar. *leiocalyx* ト命ジタモノニ當ル、然シ此植物ハ *Costus speciosus* var. *sericeus* 即チ *Costus sericeus* BLUME トハ葉裏ノ絹毛ガ深クナイコトト萼片ニ毛ノナイ點デ異ルカラ獨立ノ變種トシテ *Costus speciosus* var. *leiocalyx* トイフ別ノ變種ニスル方ガヨイト考ヘル、和名ハ葉裏ニ絹毛アルコトニ因ミきぬげほざきあやめトシテ置ク。今一ツノ標本ハ高雄州屏東郡打鐵デ相馬氏ノ採ツタモノデ果實ダケデ花ガナイカラヨクハ判ラヌガ恐ラク *Costus speciosus* var. *angustifolius* K. SCHUMANN ニ當ルモノデアラウ、葉ハおほほざきあやめトきぬげほざきあやめトデハ長橢圓披針形デアルガ此モノデハ披針形又ハ狹披針形デアリ毛ガ全クナイ、之ヲ薄イカ濃イカノ差ハアツテモ永存性ノ絹毛ヲモツ前二者トハ種トシテ區別スル方ガ正當ト考ヘルカラ *Costus formosanus* ほそばほざきあやめトイフ新種名ヲ與ヘテ置ク、若シ *Costus speciosus* var. *angustifolius* K. SCHUMANN ガ此モノト別ノ植物デアルナラバ別ニ新名ヲ與ヘネバナラス、其譯ハ *Costus speciosus* var. *angustifolius* KER トイフ名ガ文政 5 (1822) 年ニツイテ圖解サレタカラダ。多分 *Costus speciosus* var. *angustatus* BLUME 文政 10 (1827) 年ト同一變種デアラウガ葉ガ狹クテ絹毛ノアルモノダ。

次ニ *Costus* 屬ハ *Dimerocostus*, *Monocostus*, *Tapeinochilus* ノ諸屬ト共ニシ

ようが科 *Zingiberaceæ* L. C. RICHARD ノ一亞科ニシテアルガ似テ非ナル別科トスル方が正當ト思フ、其譯ハしようが目 *Amomales* LINDLEY 天保 7 (1836) 年 [異名 *Scitamineæ* LINK 文政 4 (1821) 年、LINNÆUS 氏ガ寶曆 13 (1763) 年ニ用キタ科名ヲ目名ニシタモノ、*Zingiberales* HUTCHINSON 昭和 9 (1934) 年] = 屬スル植物ノ花盤 *Discus* ノ特徴ハ系統上極メテ大切ナモノデアル。即チ花盤カラ著シイ二ツノ全縁又ハ缺刻アル蜜腺ガ突出スルノガ *Zingiberaceæ* デアツテ、花盤ノ中子房ノ隔壁ノ上ニ當ル所即チ三ヶ所デ凹ミヲ作り其ガ蜜腺ニナツテ居ル場合之ヲ隔壁蜜腺 (*Nectarium septale*, *Septaldrüsen*, *Septal gland*) トイフガ此隔壁蜜腺ヲモツテ居ルモノハくすうこん科植物 *Marantaceæ* LINDLEY ト *Costus* 群ニ限ルノデアル。其上ニしようが科ハ全草ニ揮發性芳香ガアルガ *Costus* 群ニハ少クモ地上部ニハ香氣ガナク、葉ハしようが科デハ縦ニ 2 列即チ二分ノ一葉序ニナツテ居ルノニ *Costus* 群デハ螺旋狀ニ互生スルカラ狹義ノ科トシテ分ケタ方がヨイト考ヘル。大凡 *Amomales* = 屬スル科ハばせう科 *Musaceæ* J. ST. HILAIRE 文化 2 (1805) 年、あふぎばせう科 *Strelitziaceæ* HUTCHINSON 昭和 9 (1934) 年、*Lowiaceæ* RIDLEY 明治 26 (1893) 年名ノミ、大正 11 (1922) 年記載ヲ伴ヒ有效發表、くすうこん科 *Marantaceæ* LINDLEY 天保 7 (1836) 年、だんどく科 *Cannaceæ* LINK 文政 4 (1821) 年、しようが科 *Zingiberaceæ* L. C. RICHARD 文化 5 (1808) 年ノ 6 科トナツテ居ルガ予ハおほほざきあやめ科 *Costaceæ* NAKAI ヲ加ヘテ 7 科ニシ更ニ *Strelitziaceæ* 又ハ *Musaceæ* 中ニ加ヘテアル *Heliconia* ヲ別ケテ *Heliconiaceæ* NAKAI ヲ建テテ 8 科ニシタイ。*Heliconia* トイフ植物ハ *Amomales* 中完全雄蕊ガ 4-5 個アル *Musaceæ*, *Strelitziaceæ*, *Lowiaceæ* 群ニ入ルケレドモ其等三ツノ科デハ中軸胎坐ニ多列多數ノ倒生卵子ガアルノニ對シテ *Heliconia* デハ基生胎坐ニ各 1 個ノ直立倒生卵子ガツク、此點ハ *Amomales* 中くすうこん科ト軌ヲニシテ居ル。斯クシテ分ケタ 8 科ノ區別ヲ檢索表デ示スト次ノ様ニナル。大凡從來用キラルル科ヲ區別スル特徴ハ其屬スル屬ヤ種迄下ルト前後矛盾スルモノガ多イカラ出來ル限り注意シテ之ヲ避ケテ置イタ。又くすうこん科トだんどく科トノ雄蕊ノ葯ハ一室ト書カレテ居ルガ決シテ眞ノ意味ノ一室デハナイ。眞ノ意味ノハはしばみ屬、して屬ナドニ見ル様ナモノデアル。くすうこん科、だんどく科デハさんきらい科 *Smilacaceæ* ト同様ニ葯室ノ囊壁ハ中央葯間デ着キ葯室ノ開ク迄ハ明カニ 2 室ノ葯トナツテ居ル。此ガ開ク場合ニハ此内縫合線カラ開イテ左右ニ展ガルカラ開イタモノヲ見ルト最初カラ一室デアツタモノト見誤リ易イ。反之シテばせう科、あふぎばせう科、しようが科等々デハ葯室ガ開クトキニハ二ツノ葯室ノ各中央ニ縦ニ裂隙ガ出來テ開クカラ開イタ後ニモ二ツノ葯室ガハッキリ分レテ居ルカラ葯室 2 個ト誰モ見誤ルモノガナイノデアル。其故予ハくすうこん科、だんどく科、さんきらい科ノ様ナ葯ヲ偽一室 (*Antheræ pseudouniloculares*) ト呼ブ。

- 1 { 完全雄蕊ハ4-5個、葯ハ2室、無葯雄蕊ハ1-0 ..... 2  
 完全雄蕊ハ1個、葯ハ2室又ハ偽一室、無葯雄蕊ハ5-0 ..... 5  
 葉モ苞モ互生、花ハ雌雄異花同株、各苞ニ横ニ1-3列ニ數個アリ、花梗ニ近イ方ノ苞  
 ニアル花ハ雌性、花序ノ先ノ方ノ苞ニアル花ハ雌性、萼筒ハ花軸ニ接スル側ガ縦ニ  
 裂ケ萼片ハ唇狀ニナリ先ハ3裂シ裂片ト互生シテ各1個ノ内花被ガ癒合シテ出デ殘  
 ル1個ノ内花被ハ萼唇ト相對生ス。果實ハ多肉、裂開セズ、種子ニ假種皮ナシ ..... ばせう科 *Musaceae*.  
 葉モ苞モ二列ニ出ヅ、花ハ兩全、果實ハ蒴、胞背裂開ス ..... 3  
 卵子ハ子房ノ各室ニ一個宛基生ス。種子ニ假種皮ナシ。花ハ左右相稱ナレドモ唇瓣ヲ  
 ナサズ。柱頭ハ一個分岐セズ頭狀又ハ棍棒狀、多年生大型ノ草本 ..... *Heliconiaceae*.  
 卵子ハ中軸胎坐ニ3列以上多列ニツキ多數アリ。種子ニ假種皮アリ。柱頭ハ3裂ス ..... 4  
 花被ハ離生又ハ基ガ僅ニ癒着ス。花軸ニ近キ花瓣ハ他ノ二ツノ花瓣ヨリモ小サク唇瓣  
 ヲナサズ。大型多年生草本、灌木又ハ喬木 ..... あふぎばせう科 *Strelitziaceae*.  
 花筒ヲナス。花軸ニ近キ花瓣ハ大ナル唇瓣ヲナス。大型、多年生草本、無莖、從ツテ葉  
 ハ皆根出、花ハ腋生ノ(2-3)個 ..... *Lowiaceae*.  
 子房ハ1室又ハ2室又ハ3室各室ニ1個宛ノ割合デ基生ノ卵子ガアル 其故3個ノ心  
 皮カラ成ル1室ノ場合ニハ3個ノ基生ノ卵子ヲモツコトナル。花ハ兩全、穗狀花  
 序、複穗狀花序、圓穗花叢ヲナス。萼片3個覆瓦狀排列、花瓣3個、螺旋狀ニ相重  
 ナル。外側ノ無葯雄蕊ハ花瓣様、内列ノ1個ハ帽狀、1個ハ多肉、1個ハ有性ノ雄蕊  
 ニシテ多肉ノ無葯雄蕊ト癒合ス。葯ハ偽一室、多年生草本、葉ハ2列、果實ハ蒴又  
 ハ堅果又ハ漿果、種子ニ假種皮アリ、稀ニ孔蓋アリ、隔壁蜜腺アリ ..... くずうこん科 *Marantaceae*.  
 子房ハ1-3室、側膜胎坐又ハ中軸胎坐ヲ有シ多數ノ卵子ガ1-4列ニ縱ニツク ..... 6  
 花柱ハ扁平多肉先端斜ニ柱頭アリ、萼ハ3個離生、花瓣3個基ハ相癒合ス、外列ノ無  
 葯雄蕊ガ若シアラバ2-3個花冠様、内列ノ無葯雄蕊ノ1個ハ屢々外ニ反リ偽唇ヲナ  
 ス、他ハ1個ハ直立シ有性雄蕊ト癒着ス。葯室ハ直立スル無葯雄蕊ノ側方ヨリ出デ  
 離生、偽一室、花ハ穗狀、小サキ苞ヲ有ス。卵子ハ中軸胎坐ニ縱ニ2列ニツク、種子  
 ニ假種皮ト孔蓋トアリ ..... だんどく科 *Cannaceae*.  
 花柱ハ長ク細ク纖弱ニシテ有性雄蕊ノ溝ヲ通り2個ノ葯室ノ間ヲ通りテ出ヅルコト多  
 シ、有性雄蕊ハ唇瓣ト對生ス。萼ハ筒狀、花冠ハ漏斗狀3裂シ後側ノ裂片ハ唇瓣ヲ  
 ナス。果實ハ蒴、胞背裂開ス。卵子ハ2-4列稀ニ1列、種子ニ假種皮ト孔蓋トアリ ..... 7  
 少クモ地上部ニ香氣ナシ、葉ハ螺旋狀ニ互生スルカ又ハ4列ニツク、くずうこん科同  
 様ニ隔壁蜜腺ヲ有ス、葯室ハ屢々先端ニ著シキ突起アリ、子房ハ3室ナラバ中軸胎  
 坐ヲ有シ2室ナラバ側膜胎坐又ハ隔膜胎坐ヲ有ス。卵子ハ2(1)列 ..... おほぼざきあやめ科 *Costaceae*.  
 全草ニ芳香アリ。葉ハ2列ニツケドモ苞ハ多列又ハ螺旋狀ノモノ多シ、蜜腺ハ2個大  
 型直立シ全縁又ハ缺刻アリ、葯ノ先端ニ突起ナシ。子房ハ1-3室、卵子ハ縱ニ2-4  
 列ニツキ1室ナラバ側膜胎坐ヲ有ス ..... しょうが科 *Zingiberaceae*.

終ニ本研究ニ必要デアツタ BLUME, REICHENBACH ノ著書ヲ貸與サレタ 原博  
 士ニ深謝ス。 (昭和16年2月稿)